



9006.0133

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Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/01/2005

Reviewed on 08/01/2005

1 Identification of substance:

Trade name:

RATIONAL Grill and oven detergent for RATIONAL-CleanJet® and manual cleaning

Manufacturer/Supplier:

RATIONAL AG
Iglinger Straße 62
D-86899 Landsberg



Tel.: +49-(0)8191 - 32 70

Information department: Qualitätsmanagement

Emergency information:

Internationale Giftzentrale Tel.: +49-(0)89-19240 In North America call **INFO TRAC 1-800-535-5053**
"Rechts der Isar"

2 Composition/Data on components:

Chemical characterization

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

1310-58-3 potassium hydroxide	2,5-10%
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Additional information For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

Hazard description:



Corrosive liquid. Can cause severe burns to eye and skin.



NEPA ratings (scale 0-4)

Health = 4

Fire = 0

Reactivity = 0

4 First aid measures

- General information** Immediately remove any clothing soiled by the product.
- After inhalation** In case of unconsciousness place patient stably in side position for transportation.
- After skin contact** Immediately wash with water and soap and rinse thoroughly.
- After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

5 Fire fighting measures

- Suitable extinguishing agents** Suitable extinguishing agents - for surrounding fire.
- Protective equipment** No special measures required.
- Additional information** Non-flammable.

6 Accidental release measures

- Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

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- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:** Keep receptacles tightly sealed.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

1310-58-3 potassium hydroxideREL 2 mg/m³TLV Short-term value: C 2 mg/m³

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**

- **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Breathing equipment:** Not required.

- **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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• **Eye protection:** Tightly sealed goggles.

9 Physical and chemical properties:

• **General Information**

Form:	Fluid
Color:	Light red
Odor:	Characteristic

• **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	undetermined

• Flash point:	Not applicable
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• Auto igniting:	Product is not selfigniting.
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• Danger of explosion:	Product does not present an explosion hazard.
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• Density at 20°C (68°F):	1.105 +/- 0.01 g/cm ³
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• Solubility in / Miscibility with Water:	Fully miscible
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• pH-value (10 g/l) at 20°C (68°F):	11.90 +/- 0.2
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• Solvent content:	
Organic solvents:	0.0 %

10 Stability and reactivity

• **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

• **Dangerous reactions** No dangerous reactions known

• **Dangerous products of decomposition:** Possible in traces.

11 Toxicological information

• **Acute toxicity:**

• **LD/LC50 values that are relevant for classification:**

1310-58-3 potassium hydroxide

Oral	LD50	365 mg/kg (rat)
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• **Primary irritant effect:**

• **on the skin:** Strong caustic effect on skin and mucous membranes.

• **on the eye:** Strong caustic effect.

• **Sensitization:** No sensitizing effects known.

• **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

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12 Ecological information:

- **General notes:** Must not reach bodies of water or drainage ditch undiluted or unneutralized.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:** DGD-Class.: 2,4,8



- **Hazard class:** 8
- **Identification number:** UN1814
- **Hazardous substance:** 1814 lbs, 824 kg
- **Proper shipping name (technical name):** POTASSIUM HYDROXIDE SOLUTION
- **Label** 8

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 8 Corrosive substances
- **UN-Number:** 1814
- **Packaging group:** II
- **Description of goods:** 1814 POTASSIUM HYDROXIDE SOLUTION

- **Maritime transport IMDG:**

- **UN Number:** 1814
- **Marine pollutant:** No
- **Propper shipping name:** POTASSIUM HYDROXIDE SOLUTION

- **Air transport ICAO-TI and IATA-DGR:**

- **UNID Number:** 1814
- **Propper shipping name:** POTASSIUM HYDROXIDE SOLUTION

15 Regulations

- **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

- **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

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• TSCA (Toxic Substances Control Act)

Reported/ Included.

• Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

• Prop 65 - Chemicals known to cause reproductive toxicity

None of the ingredients is listed.

• Canada:

DSL: Included.

WHMIS: Class E (corrosive)

• Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

• Hazard symbols: C Corrosive**• Hazard-determining components of labelling:** potassium hydroxide**• Risk phrases:** 35 Causes severe burns.**• Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Department issuing MSDS: Qualitätsmanagement**• Contact:** G.Q./08.05

LSA